

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A high-speed image sensor comprising a plurality of signal converters for generating electric signals according to an incident light intensity and a plurality of electric signal recorders for storing electric signals output from corresponding signal converters,

wherein each of said electric signal recorders ~~are~~is linear shaped and provided with a read-out line for each of longitudinal sections of the electric signal recorders ~~thereof~~, the read-out line being used for directly reading the electric signals out of said longitudinal sections of the electric signal recorders forming a light receptive area.

2. (Canceled).

3. (Previously Presented) The high-speed image sensor of claim 1, further comprising connectors for directly connecting said signal converters with the read-out lines without passing through said electric signal recorders.

4. (Canceled).

5. (Previously Presented) The high-speed image sensor of claim 1, wherein each said electric signal recorder is a charge coupled device type electric signal recorder.

6. (Previously Presented) The high-speed image sensor of claim 1, wherein each said electric signal recorder is a MOS type electric signal recorder.

7. (Previously Presented) The high-speed image sensor of claim 1, wherein each of said signal converters is divided into a plurality of portions insulated from each other.

8. (Currently Amended) The high-speed image sensor of ~~claim 4~~ claim 6, wherein each of said signal converters is divided into a plurality of portions insulated from each other and wherein amplifiers for amplifying the electric signals are interposed between said plurality of divided portions and said electric signal recorders.

9-11. (Canceled).

12. (Previously Presented) A high-speed image sensor comprising a plurality of signal converters for generating electric signals according to an intensity of electromagnetic waves or particle streams, and a plurality of electric signal recorders for storing electric signals output from corresponding signal converters,

wherein said electric signal recorders are linear shaped and provided with a read-out line for each of longitudinal sections thereof, the read-out line being used for directly reading out the electric signals out of a light receptive area.

13. (Previously Presented) The high-speed image sensor of claim 12, wherein each said electric signal recorder is a charge coupled device type electric signal recorder.

14. (Previously Presented) The high-speed image sensor of claim 12, wherein each said electric signal recorder is a MOS type electric signal recorder.

15. (Previously Presented) The high-speed image sensor of claim 12, wherein each of said signal converters is divided into a plurality of portions insulated from each other.

16. (Previously Presented) The high-speed image sensor of claim 14, wherein each of said signal converters is divided into a plurality of portions insulated from each other and wherein amplifiers for amplifying the electric signals are interposed between said plurality of divided portions and said electric signal recorders.

17. (Previously Presented) The high-speed image sensor of claim 12, further comprising a cuttable band-shaped space which continuously extends from one side to another side of the light receptive area.

18. (Currently Amended) A high-speed image sensor comprising a plurality of signal converters for generating electric signals according to an incident light intensity and a plurality of electric signal recorders for storing electric signals output from corresponding signal converters,

wherein said signal converters are disposed in all of, or every other, square or rectangular frames on a light receptive area; and

wherein a center line of each said electric signal recorder, in a direction from one position where electric signals are input from a signal converter to another position where electric signals are input from

an adjacent signal converter, is inclined with respect to a line connecting two positions where electric signals are input from two of said signal converters, adjacent to each other in an extension direction of said electric signal recorders, to corresponding electric signal recorders.

19. (Previously Presented) The high-speed image sensor of claim 18, wherein each said electric signal recorder is a charge coupled device type electric signal recorder.

20. (Previously Presented) The high-speed image sensor of claim 18, wherein each said electric signal recorder is a MOS type electric signal recorder.

21. (Previously Presented) The high-speed image sensor of claim 18, wherein each of said signal converters is divided into a plurality of portions insulated from each other.

22. (Previously Presented) The high-speed image sensor of claim 20, wherein each of said signal converters is divided into a plurality of portions insulated from each other and wherein amplifiers for amplifying the electric signals are interposed between said plurality of divided portions and said electric signal recorders.

23. (Previously Presented) The high-speed image sensor of claim 18, further comprising a cuttable band-shaped space which continuously extends from one side to another side of the light receptive area.

24. (Previously Presented) A high-speed image sensor comprising a plurality of signal converters for generating electric signals according to

an incident light intensity and a plurality of electric signal recorders for storing electric signals output from corresponding signal converters,

wherein each of said signal converters is divided into a plurality of portions insulated from each other.

25. (Previously Presented) An image sensing apparatus comprising said high-speed image sensor claimed in claim 1.

26. (Previously Presented) An image sensing apparatus comprising said high-speed image sensor claimed in claim 12.

27. (Previously Presented) An image sensing apparatus comprising said high-speed image sensor claimed in claim 18.

28. (Previously Presented) An image sensing apparatus comprising said high-speed image sensor claimed in claim 24.